RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10 (087)

0687,060+

Source:

Date Processed by STIC:

10/25/04

ENTERED



IFWO

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/687,060A

DATE: 10/25/2004

TIME: 15:55:22

Input Set : A:\seqlist.txt

```
4 <110> APPLICANT: Bruck, Claudine
         Godart, Stephane Andre Georges
        Marc-Hand, Martine
 6
 8 <120> TITLE OF INVENTION: FUSION PROTEINS COMPRISING HIV-1 TAT
        AND/OR NEF PROTEINS
11 <130> FILE REFERENCE: B45110C1
13 <140> CURRENT APPLICATION NUMBER: 10/687,060A
14 <141> CURRENT FILING DATE: 2003-10-16
16 <150> PRIOR APPLICATION NUMBER: 09/509,239
17 <151> PRIOR FILING DATE: 2000-03-23
19 <150> PRIOR APPLICATION NUMBER: PCT/EP98/06040
20 <151> PRIOR FILING DATE: 1998-09-17
22 <150> PRIOR APPLICATION NUMBER: GB 9720585.0
23 <151> PRIOR FILING DATE: 1997-09-26
25 <160> NUMBER OF SEQ ID NOS: 27
27 <170> SOFTWARE: FastSEQ for Windows Version 4.0
29 <210> SEQ ID NO: 1
30 <211> LENGTH: 23
31 <212> TYPE: DNA
33 <213> ORGANISM: Artificial Sequence
35 <220> FEATURE:
36 <223> OTHER INFORMATION: PCR primer
38 <400> SEQUENCE: 1
39 atcgtccatg ggtggcaagt ggt
                                                                      23
41 <210> SEQ ID NO: 2
42 <211> LENGTH: 23
43 <212> TYPE: DNA
44 <213> ORGANISM: Artificial Sequence
46 <220> FEATURE:
47 <223> OTHER INFORMATION: PCR primer
49 <400> SEQUENCE: 2
50 cggctactag tgcagttctt gaa
                                                                      23
52 <210> SEQ ID NO: 3
53 <211> LENGTH: 24
54 <212> TYPE: DNA
55 <213> ORGANISM: Artificial Sequence
57 <220> FEATURE:
58 <223> OTHER INFORMATION: PCR primer
60 <400> SEQUENCE: 3
                                                                      24
61 atcgtactag tgagccagta gatc
63 <210> SEQ ID NO: 4
64 <211> LENGTH: 24
65 <212> TYPE: DNA
```

DATE: 10/25/2004

TIME: 15:55:22

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/687,060A

Input Set : A:\seqlist.txt

```
66 <213> ORGANISM: Artificial Sequence
68 <220> FEATURE:
69 <223> OTHER INFORMATION: PCR primer
71 <400> SEQUENCE: 4
72 eggetactag ttteettegg geet
                                                                      24
74 <210> SEQ ID NO: 5
75 <211> LENGTH: 23
76 <212> TYPE: DNA
77 <213> ORGANISM: Artificial Sequence
79 <220> FEATURE:
80 <223> OTHER INFORMATION: PCR primer
82 <400> SEQUENCE: 5
83 atcgtccatg gagccagtag atc
                                                                      23
85 <210> SEQ ID NO: 6
86 <211> LENGTH: 441
87 <212> TYPE: DNA
88 <213> ORGANISM: Haemophilus influenzae
90 <400> SEQUENCE: 6
91 atggatccaa aaactttagc cctttcttta ttagcagctg gcgtactagc aggttgtagc 60
92 agecatteat caaatatgge gaatacecaa atgaaateag acaaaateat tattgeteae 120
93 cgtggtgcta gcggttattt accagagcat acgttagaat ctaaaqcact tgcttttgca 180
94 caacaggctg attatttaga gcaagattta gcaatgacta aggatggtcg tttagtggtt 240
95 atteacquie actititaqu tqqcttqact qatqttqcqu aaaaatteec acateqteat 300
96 cgtaaagatg gccgttacta tgtcatcgac tttaccttaa aagaaattca aagtttagaa 360
97 atgacagaaa actttgaaac catggccacg tgtgatcaga gctcaactag tggccaccat 420
98 caccatcacc attaatctag a
100 <210> SEQ ID NO: 7
101 <211> LENGTH: 144
102 <212> TYPE: PRT
103 <213> ORGANISM: Haemophilus influenzae
105 <400> SEQUENCE: 7
106 Met Asp Pro Lys Thr Leu Ala Leu Ser Leu Leu Ala Ala Gly Val Leu
107 1
                                         10
108 Ala Gly Cys Ser Ser His Ser Ser Asn Met Ala Asn Thr Gln Met Lys
109
110 Ser Asp Lys Ile Ile Ile Ala His Arg Gly Ala Ser Gly Tyr Leu Pro
            35
                                 40
112 Glu His Thr Leu Glu Ser Lys Ala Leu Ala Phe Ala Gln Gln Ala Asp
                            55
114 Tyr Leu Glu Gln Asp Leu Ala Met Thr Lys Asp Gly Arg Leu Val Val
                        70
116 Ile His Asp His Phe Leu Asp Gly Leu Thr Asp Val Ala Lys Lys Phe
117
                    85
                                         90
118 Pro His Arg His Arg Lys Asp Gly Arg Tyr Tyr Val Ile Asp Phe Thr
119
                100
                                    105
                                                         110
120 Leu Lys Glu Ile Gln Ser Leu Glu Met Thr Glu Asn Phe Glu Thr Met
122 Ala Thr Cys Asp Gln Ser Ser Thr Ser Gly His His His His His
123
        130
                            135
```

DATE: 10/25/2004

TIME: 15:55:22

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/687,060A

Input Set : A:\seqlist.txt

```
126 <210> SEO ID NO: 8
127 <211> LENGTH: 648
128 <212> TYPE: DNA
129 <213> ORGANISM: Human Immunodeficiency Virus
131 <400> SEQUENCE: 8
132 atgggtggca agtggtcaaa aagtagtgtg gttggatggc ctactgtaag ggaaagaatg 60
133 agacgagetg agecageage agatggggtg ggageageat etegagaeet ggaaaaaeat 120
134 ggagcaatca caagtagcaa tacagcagct accaatgctg cttgtgcctg gctagaagca 180
135 caagaggagg aggaggtggg ttttccagtc acacctcagg tacctttaag accaatgact 240
136 tacaaggcag ctgtagatct tagccacttt ttaaaagaaa aggggggact ggaagggcta 300
137 atteactece aacgaagaca agatateett gatetgtgga tetaceacac acaaggetae 360
138 ttccctgatt ggcagaacta cacaccaggg ccaggggtca gatatccact gacctttgga 420
139 tggtgctaca agctagtacc agttgagcca gataaggtag aagaggccaa taaaggagag 480
140 aacaccaqct tqttacaccc tqtqaqcctq catqqaatqq atqaccctqa qaqaqaaqtq 540
141 ttaqaqtqqa qqtttqacaq ccqcctaqca tttcatcacq tqqcccqaqa qctqcatccq 600
142 gagtacttca agaactgcac tagtggccac catcaccatc accattaa
144 <210> SEQ ID NO: 9
145 <211> LENGTH: 215
146 <212> TYPE: PRT
147 <213> ORGANISM: Human Immunodeficiency Virus
149 <400> SEQUENCE: 9
150 Met Gly Gly Lys Trp Ser Lys Ser Ser Val Val Gly Trp Pro Thr Val
152 Arg Glu Arg Met Arg Arg Ala Glu Pro Ala Ala Asp Gly Val Gly Ala
154 Ala Ser Arg Asp Leu Glu Lys His Gly Ala Ile Thr Ser Ser Asn Thr
156 Ala Ala Thr Asn Ala Ala Cys Ala Trp Leu Glu Ala Gln Glu Glu
                            55
158 Glu Val Gly Phe Pro Val Thr Pro Gln Val Pro Leu Arg Pro Met Thr
159 65
                        70
                                            75
160 Tyr Lys Ala Ala Val Asp Leu Ser His Phe Leu Lys Glu Lys Gly Gly
                    85
162 Leu Glu Gly Leu Ile His Ser Gln Arg Arg Gln Asp Ile Leu Asp Leu
163
                                    105
164 Trp Ile Tyr His Thr Gln Gly Tyr Phe Pro Asp Trp Gln Asn Tyr Thr
165
            115
                                120
                                                     125
166 Pro Gly Pro Gly Val Arg Tyr Pro Leu Thr Phe Gly Trp Cys Tyr Lys
                            135
                                                140
168 Leu Val Pro Val Glu Pro Asp Lys Val Glu Glu Ala Asn Lys Gly Glu
                        150
                                            155
170 Asn Thr Ser Leu Leu His Pro Val Ser Leu His Gly Met Asp Asp Pro
                    165
                                        170
172 Glu Arg Glu Val Leu Glu Trp Arg Phe Asp Ser Arg Leu Ala Phe His
173
                180
                                    185
174 His Val Ala Arg Glu Leu His Pro Glu Tyr Phe Lys Asn Cys Thr Ser
            195
                                200
176 Gly His His His His His
177
        210
                            215
```

RAW SEQUENCE LISTING DATE: 10/25/2004 PATENT APPLICATION: US/10/687,060A TIME: 15:55:22

Input Set : A:\seqlist.txt

```
180 <210> SEQ ID NO: 10
181 <211> LENGTH: 288
182 <212> TYPE: DNA
183 <213> ORGANISM: Human Immunodeficiency Virus
185 <400> SEQUENCE: 10
186 atggagccag tagatcctag actagagccc tggaagcatc caggaagtca gcctaaaact 60
187 gcttqtacca attgctattq taaaaaqtqt tqctttcatt qccaaqtttq tttcataaca 120
188 aaageettag geateteeta tggeaggaag aageggagae agegaegaag aceteeteaa 180
189 ggcagtcaga ctcatcaagt ttctctatca aagcaaccca cctcccaatc ccgaggggac 240
190 ccgacaggcc cgaaggaaac tagtggccac catcaccatc accattaa
192 <210> SEQ ID NO: 11
193 <211> LENGTH: 95
194 <212> TYPE: PRT
195 <213> ORGANISM: Human Immunodeficiency Virus
197 <400> SEQUENCE: 11
198 Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser
                     5
199 1
                                        10
200 Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Phe
201
202 His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly
203
204 Arg Lys Lys Arg Arg Gln Arg Arg Pro Pro Gln Gly Ser Gln Thr
206 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp
                        70
                                            75
208 Pro Thr Gly Pro Lys Glu Thr Ser Gly His His His His His His
                                        90
212 <210> SEQ ID NO: 12
213 <211> LENGTH: 909
214 <212> TYPE: DNA
215 <213> ORGANISM: Human Immunodeficiency Virus
217 <400> SEQUENCE: 12
218 atgggtggca agtggtcaaa aagtagtgtg gttggatggc ctactgtaag ggaaagaatg 60
219 agacgagctg agccagcagc agatggggtg ggagcagcat ctcgagacct ggaaaaacat 120
220 ggagcaatca caagtagcaa tacagcaget accaatgetg ettgtgeetg getagaagca 180
221 caagaggagg aggaggtggg ttttccagtc acacctcagg tacctttaag accaatgact 240
222 tacaaggcag ctgtagatct tagccacttt ttaaaaagaaa aggggggact ggaagggcta 300
223 attractere aargaagara agatateett gatetgtgga tetacearar acaaggetac 360
224 ttccctgatt ggcagaacta cacaccaggg ccaggggtca gatatccact gacctttgga 420
225 tggtgctaca agctagtacc agttgagcca gataaggtag aagaggccaa taaaggagag 480
226 aacaccagct tgttacaccc tgtgagcctg catggaatgg atgaccctga gagagaagtg 540
227 ttagagtgga gqtttgacag ccqcctaqca tttcatcacq tqqcccqaqa qctqcatccq 600
228 gagtacttca agaactgcac taqtqaqcca qtaqatccta qactaqaqcc ctqqaagcat 660
229 ccaggaagtc agcctaaaac tgcttgtacc aattgctatt gtaaaaagtg ttgctttcat 720
230 tgccaagttt gtttcataac aaaagcctta ggcatctcct atggcaggaa gaagcggaga 780
231 cagegaegaa gaeeteetea aggeagteag acteateaag titetetate aaageaacee 840
232 accteceaat ecegagggga ecegacagge ecgaaggaaa etagtggeca ecateaceat 900
233 caccattaa
235 <210> SEQ ID NO: 13
```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/687,060A

DATE: 10/25/2004 TIME: 15:55:22

Input Set : A:\seqlist.txt

```
236 <211> LENGTH: 302
237 <212> TYPE: PRT
238 <213> ORGANISM: Human Immunodeficiency Virus
240 <400> SEQUENCE: 13
241 Met Gly Gly Lys Trp Ser Lys Ser Ser Val Val Gly Trp Pro Thr Val
243 Arg Glu Arg Met Arg Arg Ala Glu Pro Ala Ala Asp Gly Val Gly Ala
245 Ala Ser Arg Asp Leu Glu Lys His Gly Ala Ile Thr Ser Ser Asn Thr
247 Ala Ala Thr Asn Ala Ala Cys Ala Trp Leu Glu Ala Gln Glu Glu Glu
                            55
249 Glu Val Gly Phe Pro Val Thr Pro Gln Val Pro Leu Arg Pro Met Thr
251 Tyr Lys Ala Ala Val Asp Leu Ser His Phe Leu Lys Glu Lys Gly Gly
253 Leu Glu Gly Leu Ile His Ser Gln Arg Arg Gln Asp Ile Leu Asp Leu
255 Trp Ile Tyr His Thr Gln Gly Tyr Phe Pro Asp Trp Gln Asn Tyr Thr
            115
                                120
257 Pro Gly Pro Gly Val Arg Tyr Pro Leu Thr Phe Gly Trp Cys Tyr Lys
                            135
259 Leu Val Pro Val Glu Pro Asp Lys Val Glu Glu Ala Asn Lys Gly Glu
                        150
                                            155
261 Asn Thr Ser Leu Leu His Pro Val Ser Leu His Gly Met Asp Asp Pro
                    165
                                        170
263 Glu Arg Glu Val Leu Glu Trp Arg Phe Asp Ser Arg Leu Ala Phe His
                180
                                    185
265 His Val Ala Arg Glu Leu His Pro Glu Tyr Phe Lys Asn Cys Thr Ser
            195
                                200
267 Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser Gln
                            215
269 Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe His
                                            235
271 Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly Arg
                                        250
                    245
273 Lys Lys Arg Arg Gln Arg Arg Pro Pro Gln Gly Ser Gln Thr His
                260
                                    265
275 Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp Pro
                                280
277 Thr Gly Pro Lys Glu Thr Ser Gly His His His His His
       290
                            295
281 <210> SEQ ID NO: 14
282 <211> LENGTH: 1029
283 <212> TYPE: DNA
284 <213> ORGANISM: Artificial Sequence
286 <220> FEATURE:
287 <223> OTHER INFORMATION: Fusion construct
289 <400> SEQUENCE: 14
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VERIFICATION SUMMARY

DATE: 10/25/2004

PATENT APPLICATION: US/10/687,060A

TIME: 15:55:23

Input Set : A:\seqlist.txt
Output Set: N:\CRF4\10252004\J687060A.raw